

AMENDMENTS TO THE CLAIMS

Please **AMEND** claims 23-28 as shown below.

Please **ADD** claims 35-39 as shown below.

The following is a complete list of all claims in this application.

1-22 (Cancelled)

23. (Currently Amended) A method of fabricating a liquid crystal display, comprising
~~the~~ steps of:

forming a gate line assembly on a first substrate, the gate line assembly comprising a gate
~~lines~~ line and a gate electrode ~~electrodes~~;

depositing a gate insulating layer ~~onto the first substrate with the gate line assembly~~;

forming a semiconductor pattern ~~on the gate insulating layer such that the semiconductor~~
~~pattern is overlapped with the gate electrodes~~;

forming a data line assembly ~~on the structured first substrate~~, the data line assembly
comprising a source electrode and a drain electrode ~~electrodes overlapped with side edges of the~~
~~semiconductor pattern~~, and a data line, the gate line and the data line defining a pixel region ~~lines~~
~~connected to the source electrode while crossing the gate lines to thereby define pixel areas~~;

depositing a protective layer ~~onto the data line assembly, the semiconductor pattern and~~
~~the gate insulating layer~~;

patterning the protective layer and the gate insulating layer to expose a portion of the drain electrode and to form a protrusion comprising the gate insulating layer and the protective layer;

~~forming a first protective pattern and a first gate insulating pattern on the data line assembly, the semiconductor pattern and the gate line assembly except some portion of the drain electrode by through etching the protective layer and the gate insulating layer, and forming a protrusion pattern at the pixel area, the protrusion pattern being formed with the second protective pattern and the second gate insulating pattern;~~

~~depositing a first transparent conductive layer onto the structured first substrate; and
patterning the first transparent conductive layer to form a pixel electrode connected to the drain electrode and covering the protrusion and to form an opening in the pixel electrode, the protrusion and the opening dividing the pixel region into a plurality of domains forming a pixel electrode at the pixel area while forming an opening pattern within the pixel electrode by through etching the first transparent conductive layer such that the pixel electrode covers the protrusion pattern while contacting the drain electrode.~~

24. (Currently Amended) The method of claim 23, further comprising the steps of:
forming a color filters at filter on a second substrate;
forming a common electrode on the color filters ~~through depositing a second transparent conductive layer onto the substrate with the color filters; and~~
aligning conjoining the first and second substrates to form a liquid crystal cell therebetween such that the pixel electrode faces the common electrode.

25. (Currently Amended) The method of claim 24, further comprising:
~~coating~~ forming a first vertical alignment film ~~onto~~ on the pixel electrode;
~~coating~~ forming a second vertical alignment film ~~onto~~ on the common electrode; and
injecting a liquid crystal into the liquid crystal cell ~~gap between the first and second~~
~~substrates.~~

26. (Currently Amended) The method of claim 25, wherein the liquid crystal has a
~~property of~~ negative dielectric anisotropy.

27. (Currently Amended) The method of claim 24, wherein the second transparent
conductive layer is formed ~~with~~ of indium tin oxide (ITO) or indium zinc oxide (IZO).

28. (Currently Amended) The method of claim 27, wherein the first transparent
conductive layer is formed of ITO or IZO ~~with indium tin oxide or indium zinc oxide.~~

29-34 (Cancelled)

35. (New) A method for fabricating a liquid crystal display, comprising steps of:
forming a gate wire pattern on a substrate, the gate wire pattern comprising a gate line
and a gate electrode;
forming a gate insulating layer;

forming a data wire pattern, the data wire pattern comprising a data line, a source electrode and a drain electrode, the gate line and the data line defining a pixel region;

forming a protective layer;

patterning the protective layer and the gate insulating layer to expose the drain electrode and to form a protrusion comprising the gate insulating layer and the protective layer, the protrusion dividing the pixel region into a plurality of domains.

36. (New) The method of claim 35, further comprising a step of forming a pixel electrode connected to the drain electrode and covering the protrusion.

37. (New) The method of claim 36, wherein the step of forming the pixel electrode comprises steps of:

forming a transparent conductive layer; and

patterning the transparent conductive layer to form the pixel electrode.

38. (New) The method of claim 37, wherein the step of patterning the transparent conductive layer comprises a step of forming an opening in the pixel electrode, the opening dividing the pixel region into a plurality of domains.

39. (New) The method of claim 38, wherein the protrusion has a portion substantially parallel to a portion of the opening.

[CLAIMs]

1. A liquid crystal display comprising:
a first substrate having a plurality of pixel areas;
at least one pair of first and second protrusions formed at each pixel area;
a pixel electrode formed at each pixel area, the pixel electrode having an opening pattern exposing the first protrusion while covering the second protrusion;
a second substrate facing the first substrate; and
a common electrode formed at the second substrate.
2. The liquid crystal display of claim 1 further comprising a negative dielectric anisotropy liquid crystal sandwiched between the first and second substrates.
3. The liquid crystal display of claim 2 further comprising a first vertical alignment film coated on the common electrode, and a second vertical alignment film coated on the pixel electrode and the first protrusion.
4. The liquid crystal display of claim 1 wherein the first and second protrusions are formed parallel to each other.
5. The liquid crystal display of claim 4, the first and second protrusions may have a shape of column having triangle cross section.
6. The liquid crystal display of claim 1 further comprising:
a thin film transistor formed at each pixel area, the thin film transistor comprising a gate electrode, a gate insulating layer formed on the gate electrode, a semiconductor pattern formed on the gate insulating layer over the gate electrode, and source and drain electrodes overlapped with side edges of the semiconductor pattern; and
a protective layer covering the thin film transistor.

7. The liquid crystal display of claim 6 wherein the first and second protrusions are formed with the same material as at least one of the gate insulating layer, the semiconductor pattern or the protective layer.

8. The liquid crystal display of claim 1 wherein the pixel electrode is formed with indium tin oxide or indium zinc oxide.

9. The liquid crystal display of claim 1 wherein the common electrode is formed with indium tin oxide or indium zinc oxide.

[CLAIMs]

1. A liquid crystal display comprising:
 - a first substrate having a plurality of pixel areas;
 - a plurality of protrusions formed at each pixel area of the first substrate;
 - a pixel electrode covering the protrusions, the pixel electrode having opening portions, the opening portions and the protrusions formed in parallel;
 - a second substrate facing the first substrate; and
 - a common electrode formed at the second substrate.
2. The liquid crystal display of claim 1 further comprising a negative dielectric anisotropy liquid crystal sandwiched between the first and second substrates.
3. The liquid crystal display of claim 3 further comprising vertical alignment films coated on the common electrode and the pixel electrode.
4. The liquid crystal display of claim 1 wherein the cross section of the protrusion is shaped as a rectangle.
5. A liquid crystal display comprising:
 - a first substrate;
 - a gate line assembly formed at the first substrate, the gate line assembly comprising gate lines, with gate electrodes extended from the gate lines;
 - a gate insulating pattern covering the gate lines;
 - a semiconductor pattern formed on the gate insulating pattern over the gate electrodes;
 - a data line assembly formed on the structured substrate, the data line assembly comprising source and drain electrodes overlapped with side edges of the

semiconductor pattern, and data lines connected to the source electrodes such that the data lines cross the gate lines;

a protective pattern covering the data line assembly and the semiconductor pattern except some portion of the drain electrode, the protective pattern being absent at a pixel area defined by the neighboring gate and data lines;

a protrusion pattern formed at the first substrate, the protrusion pattern having at least two protrusions positioned within the pixel area;

a pixel electrode covering the protrusion pattern at the pixel area while contacting the drain electrode, the pixel electrode having an opening pattern, the opening pattern being alternately arranged with the protrusion pattern;

a second substrate facing the first substrate; and

a common electrode formed at the second substrate.

6. The liquid crystal display of claim 5 wherein the cross section of the protrusion pattern is shaped as a rectangle.

7. The liquid crystal display of claim 6 wherein the protrusion pattern comprises an under-layer formed with the same material as the gate insulating pattern, and an over-layer formed with the same material as the protective pattern.

8. The liquid crystal display of claim 5 wherein the gate insulating pattern has the same shape as the protective pattern except some portion under the drain electrode.

9. The liquid crystal display of claim 5 further comprising:
color filters formed at the second substrate while corresponding to the pixel areas of the first substrate, the color filters being positioned between the common electrode

and the second substrate; and

a light interception layer interposed between the neighboring color filters.

10. The liquid crystal display of claim 5 further comprising a negative dielectric anisotropy liquid crystal sandwiched between the first and second substrates.

11. The liquid crystal display of claim 10 further comprising vertical alignment films formed on the pixel electrode and the common electrode to vertically align liquid crystal molecules.

12. The liquid crystal display of claim 5 wherein the common electrode is formed with indium tin oxide or indium zinc oxide.

13. The liquid crystal display of claim 12 wherein the pixel electrode is formed with indium tin oxide or indium zinc oxide.

14. The liquid crystal display of claim 5 further comprising an ohmic contact layer disposed between the semiconductor pattern and the source and drain electrodes.

15. A method of fabricating a liquid crystal display comprising the steps of:
forming a gate line assembly on a first substrate, the gate line assembly comprising gate lines and gate electrodes;

depositing a gate insulating layer onto the first substrate with the gate line assembly;

forming a semiconductor pattern on the gate insulating layer such that the semiconductor pattern is overlapped with the gate electrodes;

forming a data line assembly on the structured first substrate, the data line assembly comprising source and drain electrodes overlapped with side edges of the semiconductor pattern, and data lines connected to the source electrode while crossing

the gate lines to thereby define pixel areas;

depositing a protective layer onto the data line assembly, the semiconductor pattern and the gate insulating layer;

forming a first protective pattern and a first gate insulating pattern on the data line assembly, the semiconductor pattern and the gate line assembly except some portion of the drain electrode by etching the protective layer and the gate insulating layer, and forming a protrusion pattern at the pixel area, the protrusion pattern being formed with the second protective pattern and the second gate insulating pattern;

depositing a first transparent conductive layer onto the structured first substrate;
and

forming a pixel electrode at the pixel area while forming an opening pattern within the pixel electrode by etching the first transparent conductive layer such that the pixel electrode covers the protrusion pattern while contacting the drain electrode.

16. The method of claim 15 further comprising the steps of:

forming color filters at a second substrate;

forming a common electrode on the color filters through depositing a second transparent conductive layer onto the substrate with the color filters; and

aligning the first and second substrates such that the pixel electrode faces the common electrode.

17. The method of claim 16 further comprising:

coating a first vertical alignment film onto the pixel electrode;

coating a second vertical alignment film onto the common electrode; and

injecting a liquid crystal into the gap between the first and second substrates.

18. The method of claim 17 wherein the liquid crystal has a property of negative dielectric anisotropy.

19. The method of claim 16 wherein the second transparent conductive layer is formed with indium tin oxide or indium zinc oxide.

20. The method of claim 19 wherein the first transparent conductive layer is formed with indium tin oxide or indium zinc oxide.